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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,339	08/12/2005	Kenneth Guild	P/63634	9153
156 7590 10/09/2007 KIRSCHSTEIN, OTTINGER, ISRAEL & SCHIFFMILLER, P.C. 489 FIFTH AVENUE NEW YORK, NY 10017			EXAMINER BELLO, AGUSTIN	
			ART UNIT 2613	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,339

Applicant(s)

GUILD, KENNETH

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/12/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Feuer (U.S. Patent Application Publication No. 2006/00153563).

Regarding claim 13, Feuer teaches applying at least two wavelength channels having different wavelengths but which are modulated with the same information to an input of the switching matrices (reference numeral 307 in Figure 3) of the start node cross-connect provided for these wavelengths; transmitting the at least two wavelength channels to the target node cross-connect (e.g. any of nodes 303 in Figure 3); and dropping the at least two wavelength channels (e.g. 192.2 THz, 192.6 THz in Figure 3) at outputs of different switching matrices of the cross-connect provided for the different wavelengths.

Regarding claim 14, Feuer teaches the method according to claim 13, and the step of routing the at least two wavelength channels via different intermediate cross-connects between the start node and target node cross-connects (inherent in the bi-directional nature of the network).

Regarding claim 15, Feuer teaches the method according to claim 14, and the step of keeping the wavelengths of the at least two wavelength channels during transmission between

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the start node and target node cross-connects (inherent in the presence of the same wavelength at the start node and the end node).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feuer in view of Graves (U.S. Patent No. 7,212,739).

Regarding claim 16, Feuer teaches the method according to claim 14, but differs from the claimed invention in that Feuer fails to specifically teach the step of modifying the wavelength of at least one of the wavelength channels at an intermediate node cross-connect. However, Graves teaches that modification of a wavelength at an intermediate node crossconnect is well known in the art (reference numeral 14 in Figure 2). One skilled in the art would have been motivated to modifying the wavelength of at least one of the wavelength channels at an intermediate node cross-connect in order to allow conversion from one wavelength to another wavelength. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the wavelength of at least one of the wavelength channels at an intermediate node cross-connect.

Regarding claim 17, Feuer teaches the method according to claim 16, and the step of jointly defining routing paths of the at least two wavelength channels by a central network controller (reference numeral 301 in Figure 3) operative for choosing the different wavelengths

for transmission between a last intermediate node cross-connect and the target node cross-connect.

Regarding claim 18, the combination of Feuer and Graves teaches the step of dividing the wavelengths transmissible in the optical network into at least two groups (e.g. Multicast and Unicast of Feuer), and the step of selecting the wavelengths of the at least two wavelength channels from different groups (as seen in Figure 5 of Feuer), each wavelength modification of one of the channels at an intermediate node cross-connect occurring between wavelengths of a same group (reference numeral 14 in Figure 2).

Regarding claims 19 and 22, Feuer teaches a node for a wavelength division multiplex optical communications network, comprising: a wavelength selective optical cross-connect (reference numeral 307 in Figure 3) having a plurality of inputs for optical wavelength multiplex lines; a plurality of switching matrices (e.g. inherent within wavelength selective crossconnect 307 in Figure 3 and at each node 303), each switching matrix being operative for switching wavelength channels of specific wavelength (e.g. the ability to drop channels at each of subscriber nodes); a plurality of add/drop ports for adding data traffic (e.g. “add” “drop” in Figure 3 and inherent in each subscriber node). Feuer differs from the claimed invention in that Feuer fails to specifically teach a signal divider/selector for distributing/selecting an information signal to be added/dropped to at least two of the add/drop ports of the switching matrices provided for different wavelengths. However, Graves teaches that this concept is well known in the art (reference numeral 14, multiple output “K” in Figure 2). One skilled in the art would have been motivated to include a signal divider/selector for distributing/selecting an information signal to be added to at least two of the add/drop ports of the switching matrices provided for

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different wavelengths in order to allow the newly added/dropped signal to sent to a plurality of other subscribers. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include a signal divider/selector for distributing/selecting an information signal to be added/dropped to at least two of the add ports of the switching matrices provided for different wavelengths.

Regarding claims 20, and 23 the combination of references and Graves in particular teaches that the signal divider is an optical signal divider (inherent).


Regarding claims 21 and 24, the combination of references differs from the claimed invention in that it fails to specifically teach that the signal divider/selector is an electrical signal divider/switch, and in that an opto-electrical transducer is provided between the signal divider/switch and the add data traffic input ports/output ports connected to the signal divider/switch. However, conversion between optical and electrical signals and back is well known in the art and Official Notice is given to that effect. One skilled in the art would have been motivated to include an electrical signal divider/switch, and in that an opto-electrical transducer is provided between the signal divider/switch and the add data traffic input ports/output ports connected to the signal divider/switch in order to reduce the overall cost of the system. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include an electrical signal divider/switch, and in that an opto-electrical transducer is provided between the signal divider/switch and the add data traffic input ports/output ports connected to the signal divider/switch.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Agustin Bello
Primary Examiner
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